



UNITED STATES PATENT AND TRADEMARK OFFICE

LM

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,239	02/13/2001	Keishi Sugimoto	56937-024	8013
<div>759009/27/2007 McDERMOTT, WILL & EMERY 600 13th Street, N.W. Washington, DC 20005-3096</div>			<div>EXAMINER PARK, JUNG H</div>	
			<div>ART UNIT 2616</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE 09/27/2007</div>	<div>DELIVERY MODE PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/781,239

Applicant(s)

SUGIMOTO ET AL.

Examiner

Jung Park

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4-7,9,13-17 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) 1,3,8,10-12 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4-7,9,13-17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities:

In claim 2, line 3, PID and TS are not defined in the previous lines.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2, 7, 17, 20, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2, 7, 17, 20, and 21, the terms of "necessary" and "unnecessary" are kind of vague and indefinite since it is unclear as to under what circumstance or degree, it is to be considered as "necessary" and "unnecessary".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4-7, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (US 6353613, "Kubota").

Regarding claim 2, Kubota discloses a digital broadcast receiving apparatus (device for receiving a transport stream, see col.2, ln.59-64) comprising:

- a packet-overwriting device (SI/PSI regenerator, see 67 fig.15) capable of avoiding unnecessary-packet areas (unnecessary parts are deleted to combine the PSI and SI into a single, see col.14, ln.15-20) corresponding to unnecessary packet identifiers (PIDs) (avoiding overlapped PID values within PSI and SI, see col.14, ln.15-20) in a first transport stream (TS) (1st TS, see S53 fig.15 and col.14, ln.5-6) using packets corresponding to necessary PIDs in a second TS (2nd TS, see S37, fig.15; col.14, ln.15-20; and col.13, ln.12-18).

Kubota does not explicitly disclose the limitation of "overwriting." However, Kubota discloses the method of avoiding unnecessary information and avoiding overlap of the PID values and deleting unnecessary parts. That is, some of the unnecessary parts are deleted and/or overwritten to combine the PSI and SI into a single. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to overwrite some unnecessary information with necessary information in order to avoid transmission of unnecessary information for processing efficiently at receiving device.

Regarding claim 4, Kubota discloses, "wherein when packets to be multiplexed by the overwriting (multiplexing of S37 and S53 fig.15), the packets in at least one of the first and second TSs are rewritten to make the packets to be different from one another (PSI and SI into a single, see col.14, ln.15-20)."

Regarding claim 5, Kubota discloses, "wherein PIDs of packets in the first TS where packets are rewritten through the overwriting are rewritten (avoiding overlap of the PID, see col.14, ln.15-20)."

Regarding claim 6, Kubota does not explicitly disclose, "wherein NULL-packet areas are the unnecessary-packet areas corresponding to the unnecessary PIDs and are given priority." However, Kubota discloses the null packet generator to supply the lack of transmission capacity (see col.14, ln.32-37) and the TS size is fixed as shown in Fig.1. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to apply the NULL packet generator to fill-up the unnecessary packet areas corresponding to the unnecessary PIDs and give priority to supply the lack of transmission capacity because it is inoperable without filling up the unnecessary fields.

Regarding claim 7, it is a claim corresponding to claim 1, except the limitations of "unnecessary packet detecting means, necessary packet extracting means, and packet-overwriting means" which are inherently existed for each of the functions as rejected in claim 1 and is therefore rejected for the similar reasons set forth in the rejection of claim 1.

Regarding claim 20, it is a claim corresponding to claim 1, except the limitation of "registering (inherent to register, see fig.1 and col.14, ln.15-20)" and is therefore rejected for the similar reasons set forth in the rejection of claim 1.

Regarding claim 21, it is a claim corresponding to claim 1, except the limitation of "computer-readable medium". However, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to use software-based machines. The benefit using computer-readable medium is that program can be changed and upgraded for new features easily and is therefore rejected for the similar reasons set forth in the rejection of claim 1.

Allowable Subject Matter

6. Claim 17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
7. Claims 9, 13-16, and 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung Park whose telephone number is 571-272-8565. The examiner can normally be reached on Mon-Fri during 6:15-3:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 2616

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JP
Jung Park
Patent Examiner

Robert W. Wilson
Robert W. Wilson
9/16/07